

UNITOP DECOUPLING BOARD



- > stress-reducing underlay
- > reduces impact noise
- > safer on problematic substrates
- > very low emission - EC1-PLUS

Product description

Stress-relieving decoupling and impact noise reducing board for parquet and multi-layered parquet indoors, and for ceramic tiles and natural stone indoors and outdoors (you will find more detailed information on outdoor use under "For a perfect system"). The board is used especially for problematic substrates.

The Unitop decoupling board is a very low emission laying material (acc. to GEV), breakproof and rot-resistant.

It can be used as decoupling and impact noise reducing board on wall and floor areas indoors under many covering materials (ceramic tiles and natural stone, parquet, as well as multi-layer parquet) for traffic loads of up to 5 kN/m².

For ceramic tiles and natural stone with a material thickness of less than 10 mm as well as for any covering formats less than 10 x 10 cm, filling is required with a fibre-reinforced filler (min. 3 mm layer thickness). Only the 4 mm board is suitable for use in underfloor heating systems.

Delivery format

Container	Outer packaging	Pallet
0.72 M2 / STK	15 mm	60 STK
0.72 M2 / STK	12 mm	80 STK
0.72 M2 / STK	9 mm	100 STK
0.72 M2 / STK	7 mm	120 STK
0.72 M2 / STK	4 mm	200 STK

Storage

Can be stored frost-free, cool, and dry on wooden shelves in the unopened original container for 0 days

Processing

Processing

In combination with ceramic coverings and natural stone:

Apply the flexible adhesive mortar (C2, S1) indoors to the prepared substrate, and the suitable cementitious compound seal (CM O2P) outdoors with a suitable toothed trowel (4 or 6 mm). Place the Unitop decoupling board onto the adhesive/compound seal before it has set and tap or rub it

Tile laying technology

in. The Unitop decoupling boards must be installed over the entire area without cavities. Make sure that no cross joints occur during installation. Outdoors, the entire surface must be reworked with the compound seal and the fronts must also be accurately closed with the compound seal. Expansion joints should be applied to adjacent ascending structures (incl. edge insulation strips). Lay the surface covering (natural stone or ceramic) with the thin-bed process with flexible adhesive mortar for the laying material (C2, S1) according to the technical rules.

Important for the impact noise reduction:

There may not be any connection between the joint edges of the individual adjacent Unitop decoupling boards. Edge insulation strips are to be applied to adjacent structures.

In combination with parquet and laminate floors:

Apply suitable parquet adhesives such as PU 566, LE 555, MS-K530, MS-K511, MS-K88 to the prepared substrate with a suitable trowel toothing (B1, B2, B3, PK) depending on the substrate and the manufacturer's instructions. Place the Unitop decoupling board in the adhesive bed and tap or rub in with a suitable tapping plank. After a drying time (product and temperature-dependent) of 6-24 hours of the parquet adhesive used, apply parquet adhesive of the same system with suitable toothing depending on parquet type (B2, B3, PK) to the Unitop decoupling board and lay the parquet to be glued.

Important for the impact noise reduction:

There may not be any connection between the joint edges of the individual adjacent impact noise reduction elements. Edge insulation strips are to be applied to adjacent structures.

Technical data

Colour	white
Format	60 x 120 cm
Tolerances	Cut: +/- 1.0 mm Thickness: +/- 0.5 mm

Test certificates

Tested in accordance with (standard, classification ...)

Trittschallminderung nach DIN EN ISO 140-8 in Verbindung mit Flexklebern (C2, S1) auf Rohdecke - Oberflächenbelag Fliesen mit Flexklebern verklebt.

Trittschallminderung nach DIN EN ISO 140-8 in Verbindung mit elastischen Parkettklebstoffen wie Murexin X-Bond-Klebstoffen auf Rohdecke - Oberflächenbelag Massivholz-Stabparkett ebenfalls mit elastischen Parkettklebstoffen verklebt.

Substrate

Suitable substrates

Concrete
Cement screed
Anhydrite screed
Mastic asphalt
Plaster
Lime-cement plaster

Tile laying technology

Masonry
Gypsum plasterboard
Gypsum plasterboard
Smooth concrete
Aerated concrete
Wooden materials

Suitable on all standard substrates as well as on old tile and natural stone flooring, adhesive concrete block flooring, mastic asphalt, dry screeds, chipboard, metal, glass etc. on old substrates with adhesive mortar layers as well as on conventional cement and calcium sulphate screeds. 4 mm Unitop decoupling board is recommended on heating screed; other thicknesses can also be used but may lead to greater loss of efficiency of the underfloor heating system. Electric underfloor heating can also be glued directly to the boards.

The substrate must be dry, frost-free, solid, weight-bearing, dimensionally stable, free of dust, dirt, oil, grease, release agents and loose parts, and it must comply with the applicable technical national and European directives, standards and "generally accepted rules of the trade".

For a perfect system

Description

When used outdoors under ceramic tiles and natural stones, embedding (bonding and reworking of the board) in the suitable cementitious compound seal (CM O2P) is absolutely necessary. The fronts must also be accurately closed with the cementitious compound seal.

Product and processing instructions

Material information:

- When working outside the ideal temperature and/or humidity range, the material properties may change significantly.
- Temper materials accordingly before processing!
- To retain the product properties, no foreign materials may be mixed in!
- Water dosing amounts or thinning specifications must be precisely kept!
- Check coloured products before use for colour accuracy!
- Colour consistency can only be guaranteed within a batch.
- The colouring is significantly influenced by the environmental conditions.

Environmental information:

- Do not process at temperatures below + 5 °C!
- The ideal temperature range for material, substrate and air is +15 °C to +25 °C.
- The ideal relative air humidity range is between 40% to 60%.
- Increased humidity and/or lower temperatures delay, lower air humidity and/or higher temperatures accelerate drying, setting and hardening.
- Ensure sufficient ventilation during the drying, reaction and hardening phase; avoid draughts!
- Protect from direct sunlight, wind and weather!
- Protect adjacent components!

Tips:

- We recommend using a test surface first or a small area for initial, small-scale testing.
- Observe the product data sheets of all MUREXIN products used in the system.
- Keep a genuine original container of the respective batch for later repair work.

The information provided reflects average values that were obtained under laboratory conditions. Due to the use of natural raw materials, the indicated values of individual deliveries may vary slightly without impacting the product suitability.

Safety instructions

This leaflet is based on extensive experience, is intended to convey the best of our knowledge, is not legally binding and does neither constitute a contractual legal relationship nor a subsidiary obligation resulting from the bill of sale. The quality of our materials is guaranteed within the framework of our general terms and conditions. Our products may be used by professionals and/or experienced and accordingly technically skilled persons only. Users are not released from inquiring in case of uncertainties or from rendering professional workmanship. We recommend using a test surface first or a small area for initial, small-scale testing. Naturally, it is not possible to describe or foresee all possible current and future uses and peculiarities. Information that is assumed to be familiar to experts has been omitted.

Please observe the current, technical, national and European standards, guidelines and data sheets regarding materials, substrates and the subsequent construction. Please contact us if you have any reservations or doubt.

This version is rendered invalid if a new version is released. The most recent data sheets, safety data sheets and the terms and conditions are available online at www.murexin.com.

Appendices

Technical Data:	4 mm	7 mm	9 mm	12 mm	15 mm
Weight:	ca. 3 kg/m ²	ca. 45	ca. 6 kg/m ²	ca. 8,4 kg/m ²	ca. 10 kg/m ²
Crack bridging:	1,41 mm	1,54 mm	1,61 mm		1,87 mm
Thermal conductivity λ_{10} (DIN EN 12667):	0,095 W/mK	0,0793 W/mK	0,095 W/mK	0,0944 W/mK	0,0947 W/mK
Thermal resistance R (DIN EN 12667):	0,042 m ² K/W	0,088 m ² K/W	0,095 m ² K/W	0,127 m ² K/W	0,158 m ² K/W
Thermal transmittance U- value (DIN EN 12667):	23,81 W/m ² K	11,36 W/m ² K	10,53 W/m ² K	7,78 W/m ² K	6,33 W/m ² K
Impact sound reduction loose installation (EN ISO 140-8):	ca. 13 dB	-	ca. 14 dB	-	ca. 19 dB
Impact sound reduction with tile adhesive (DIN EN ISO 10140):	ca. 10 dB	-	ca. 11 dB	-	ca. 10 dB
Impact sound reduction with parquet adhesive (DIN EN ISO 10140):	ca. 14 dB	ca. 12 dB	ca. 12 dB	ca. 13 dB	ca. 13 dB
Compressive strength (DIN EN 826):	590 kN/m ²	-	1330 kN/m ²	-	2190 kN/m ²
Dynamic stiffness s (DIN EN 29052-1)	680 MN/m ³	-	473	-	-
Water vapour diffusion resistance factor μ (DIN EN ISO 12572):	13	25	8	68	-
Fire classification (EN 13501):	E	E	E	E	E

Loads / Traffic Loads:	
Ceramic coverings: e.g. porcelain stoneware for highly loaded areas Material thickness: min. 15 mm Format: min. 20 × 20 cm, max. 40 × 40 cm (0.04 – 0.16 m ²)	10 kN/m ²
Ceramic coverings: e.g. stoneware, porcelain stoneware Material thickness: min. 9 mm Format: min. 20 × 20 cm, max. 60 × 60 cm (0.04 – 0.36 m ²)	7,5 kN/m ²
Ceramic coverings: e.g. stoneware, porcelain stoneware Material thickness: min. 9 mm Format: min. 20 × 20 cm, max. 120 × 120 cm (0.04 – 1.44 m ²)	5 kN/m ²
Ceramic coverings: e.g. stoneware, porcelain stoneware Material thickness: min. 9 mm Format: min. 10 × 10 cm, max. 120 × 260 cm (0.01 – 3.12 m ²)	3 kN/m ²
Hard stone: Material thickness: 3 cm Format: min. 20 × 20 cm, max. 60 × 60 cm (0.04 – 0.36 m ²)	5 kN/m ²
Hard stone: Material thickness: 1 cm Format: min. 30 × 30 cm, max. 30 × 60 cm (0.09 – 0.18 m ²)	3 kN/m ²
Soft stone: Material thickness: 3 cm Format: min. 20 × 20 cm, max. 60 × 60 cm (0.04 – 0.36 m ²)	3 kN/m ²
Concrete stone: Material thickness: 6 cm Format: min. 20 × 20 cm, max. 60 × 60 cm (0.04 – 0.36 m ²)	7,5 kN/m ²
Concrete stone: Material thickness: 2 cm Format: min. 20 × 20 cm, max. 40 × 40 cm (0.04 – 0.16 m ²)	3 kN/m ²